

***Astragalus tenellus* Pursh.**

loose-flower milk-vetch
Fabaceae (Pea Family)

Status: State Threatened

Rank: G5S1

General Description: Adapted from Hitchcock et al. (1961): This freely branching greenish perennial grows from a heavy root. The plant is sparsely hairy with small, straight, appressed hairs that frequently have a bulbous base. The numerous slender, nearly erect stems of this plant are 8 to 12 in. (20 to 60 cm) tall. The leaves are 1 to 4 in. (3 to 10 cm) long. The stipules are connate opposite the petioles and 1/8 in. (3 to 6 mm) long. There are 11 to 25, but sometimes up to 31 leaflets that are linear-lanceolate to linear-oblongate, 1/4 to 3/4 in. (5 to 20 mm) and 1/16 to 1/4 in. (1 1/2 to 5 mm) broad. The peduncles are mostly shorter than the leaves and usually much shorter than the very loose, 7- to 20-flowered racemes. The flowers are 1/4 to 1/2 in. (6 to 9 mm) long, mostly ochroleucous but sometimes pinkish-tinged and the keel is usually somewhat purplish-tipped. The pedicels are 1/32 to 1/8 in. (1 to 3 mm) long. The calyx is 1/8 to 1/4 in. (2 1/2 to 4 mm) long with linear-lanceolate teeth about 2/3 as long as the tube. The banner is erect. The wings are 1/32 to 1/16 in. (1 to 2 mm) longer than the keel. The pods are pendulous with a stipe as long to nearly twice as long as the calyx. The body of the pods are glabrous (in the Pacific Northwest), often finely mottled, membranous, linear-elliptic, 1/4 to 1/2 in. (7 to 15 mm) long, 1/8 to 1/4 in. (3 to 5 mm) broad, strongly compressed, 1-celled, and the suture is neither sulcate or intruded.

Identification Tips: Of the species of *Astragalus* found in Washington, *A. tenellus* is most closely related to *A. microcystis*, a State Sensitive species. These species can be distinguished by the nature of their pods and stipules upon drying. The pods of *A. tenellus* are laterally compressed and oblong or lentiform in profile, not inflated, and sometimes stipitate, while its stipules do not blacken upon drying. The pods of *A. microcystis* are inflated, obovoid or subglobose, and sessile, while its stipules turn black upon drying.

Phenology: Flowers from June to July.

Range: Loose-flowered milk-vetch is found from the Great Plains, north to Yukon, and west to the Rocky Mountains and the eastern Great Basin. This species is disjunct on the Columbia Plateau in Washington and on the Thompson Plateau in British Columbia. In Washington, it is found on clay buttes in Douglas County.

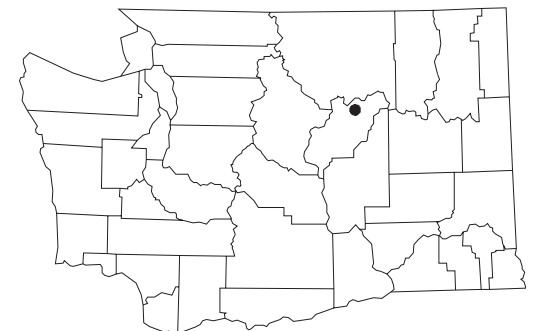
Astragalus tenellus

loose-flower milk-vetch



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Known distribution of
Astragalus tenellus
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Photo by James Reveal



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Habitat: This species is frequently found on alkaline clay and also on calcareous soil in grasslands. Associated species in Washington include big sagebrush (*Artemisia tridentata*), granite gilia (*Leptodactylon pungens*), fescue (*Festuca* spp.), Sandberg bluegrass (*Poa sandbergii*), and basalt milkvetch (*Astragalus filipes*).

Ecology: *Aster tenellus* prefers bare, fast-eroding outcrops and slopes composed of alkaline clay.

State Status Comments: There is only one known extant occurrence in Washington (in Douglas County). The site is grazed and seeded with *Agropyron cristatum*, and there are other non-native species present. The land is privately owned.

Inventory Needs: Additional inventory is needed to determine the actual range and abundance of this species in the state. Other clay buttes should be surveyed. The one documented occurrence needs to be re-visited and monitored.

Threats and Management Concerns: Definite threats have not been identified for this species. However, the small range of this taxon in Washington and the small number of known occurrences are major concerns. Any disturbance to the immediate habitat, such as grazing, development, and recreational activities, constitute a threat. The easily erodable substrate increases the vulnerability of the one known population.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.